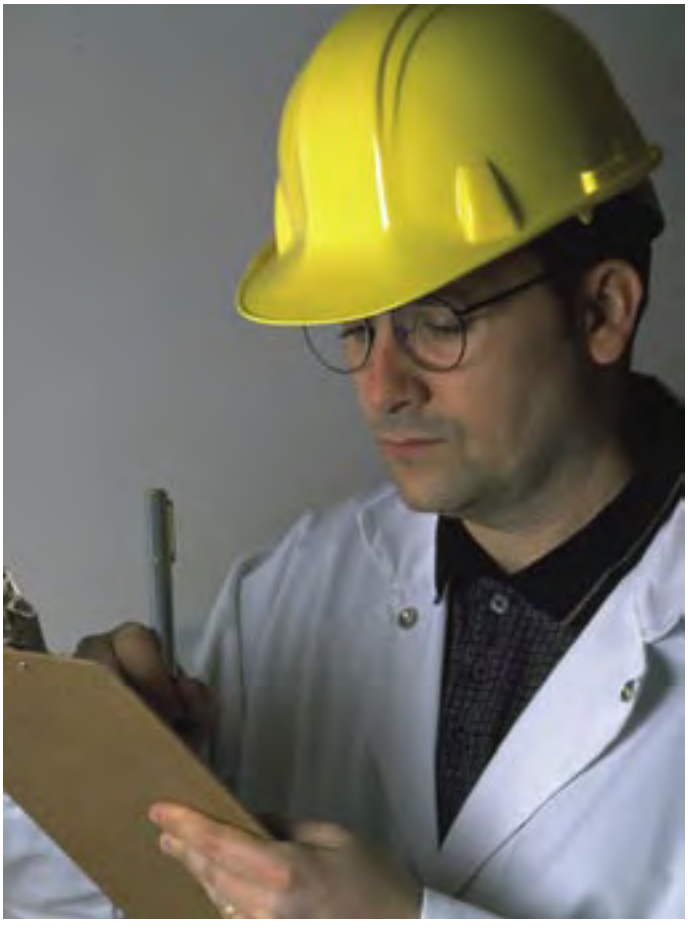
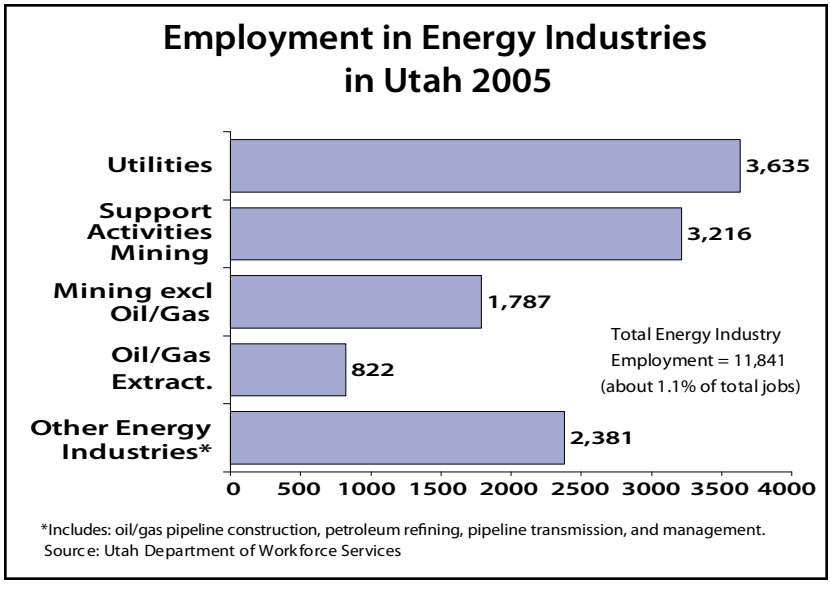
The Industries & Occupations of Energy



The theme is energy. This industry is very important because it produces the energy we need to fuel our economic engine. Without it, our lifestyle would suffer as would our local, national, and international economies. Energy is the stuff that makes things go.

Let's Get Specific

Energy is a term being used out in the market that has different meanings for different audiences. Here is what we at the Department of Workforce Services (DWS) are defining as energy within our very organized industry classification structure. Energy consists of four different sub-units: oil and gas extraction; mining, except oil and gas; support activities for mining; utilities; and an "other" category that is the sum of some seven smaller energy industries (see the footnote on the graph for a listing of these). To put these industries into perspective, see the graph that shows the level of employment in each of the sectors. Also included is the total employment for all energy industries in the state.



The energy industry in Utah has the dubious honor of being both the highest paying, and the smallest in the number of jobs. The average pay in the industry is over $61,500. Energy industries account for the some 11,800 workers, or about 1 percent of the total 1.1-million payroll workers in Utah.

Occupations in Energy

What comes to mind when you speak of the jobs in the energy business? Do you think of mining, or power generation, or drilling, or truck driving? The industry determines the *how* of getting things done. That means the technology, the equipment etc. So this *how* determines which skills and what occupations will be needed in the industry. Each energy sub-industry, like oil and gas extraction, has what we call a staffing pattern, or a list of the occupations that are employed by the industry. In Utah, we have mining activities concentrated in the open-pit environment, underground (coal), and drilling for oil and gas. Each of these industry environments calls for a slightly different set of occupations and skills.

For example, in coal mining, most workers in Utah work underground. On the other hand, in copper mining, most workers are in an open-pit setting. The occupations needed for each mining setting are somewhat unique. Both types of mining move material from one place to another, but the types/occupations of workers are different. So, each kind of mining/energy-related activity has its own unique set of skill/occupation requirements.

Higher-Employment Occupations & Average Hourly Wage 2005

Oil & Gas Extraction

	Estimated Employment	Average Hourly Wage
Gas Compressor & Gas Pumping Station Operators	90	27.00
Service Unit Operators, Oil, Gas, & Mining	50	19.60
Roustabouts, Oil & Gas	40	16.10
Chemical Plant & System Operators	30	23.80
Petroleum Engineers	30	48.50

Mining (except Oil & Gas)

Mining Machine Operators	1020	20.40
Industrial Machinery Mechanics	310	19.60
Operating Engineers & Other Construction Equipment Operators	180	16.20
First-Line Supervisors/Managers of Construction Trades & Extraction Workers	170	34.50
Maintenance & Repair Workers, General	30	48.50

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Higher-Employment Occupations & Average Hourly Wage 2005

Support Activities for Mining

	Estimated Employment	Average Hourly Wage
Service Unit Operators, Oil, Gas, & Mining	430	14.80
First-Line Supervisors/Managers of Construction Trades & Extraction Workers	190	24.80
Helpers - Production Workers	170	16.50
Helpers - Extraction Workers	160	15.20
Rotary Drill Operators, Oil & Gas	120	21.40
Derrick Operators, Oil & Gas	70	17.80

Utilities

Power Plant Operators	330	26.50
Electrical & Electronics Repairers, Powerhouse, Substation, & Relay	220	31.50
Meter Readers, Utilities	150	17.10
Industrial Machinery Mechanics	140	30.90
First-Line Supervisors/Managers of Production & Operating Workers	130	36.50
Electrical & Electronic Engineering Technicians	100	27.40
Customer Service Representatives	90	16.00
Maintenance Workers, Machinery	90	22.40

Listed in the box is each of the four energy industries with examples of the occupations with the most jobs in that industry. Also included are the average hourly wages for the job titles. Most of these occupations don't require significant formal institutional training, rather more of the on-the-job type training. Some are more skilled-trade instruction/apprenticeship-based and others demand sheer years of experience. Virtually all of the occupations shown pay well.

This article has presented a glimpse of the industry and occupation dimensions of the energy industry.

More? go to:
http://jobs.utah.gov/careers/mining/